

What is claimed is:

1. A work screening apparatus comprising:

a slope way for sequentially transporting a plurality of works for which inspection has been completed by an inspection apparatus;

a transport unit equipped with a plurality of work holding spaces, so that
5 the plurality of works sequentially transported via the slope way are independently held in the plurality of work holding spaces, wherein a leap inhibiting wall is arranged at a prescribed position between the slope way and the work holding space so as to inhibit each of the works from leaping outside therefrom; and

a discharge unit for automatically discharging the plurality of works
10 transported thereto from the transport unit at a prescribed discharge position in response to inspection results thereof produced by the inspection apparatus.

2. A work screening apparatus according to claim 1, wherein the plurality of works are sequentially put into the plurality of work holding spaces independently in accordance with rotation of the transport unit, which includes a secondary transport unit having a planar portion for receiving the plurality of works
5 transported thereto and for further transporting the plurality of works towards the

prescribed discharge position, and said transport unit is installed in a hollow of a housing so that each of the work holding spaces is defined between a circumferential wall of the hollow and a bottom of the hollow, and wherein an upper surface of the secondary transport unit is set substantially a same height as the bottom of the hollow, and an opening is formed to partially cut out the circumferential wall of the hollow to communicate with the secondary transport unit, and the opening of the hollow is arranged just above the upper surface of the secondary transport unit.

3. A work screening apparatus according to claim 2, wherein a gap is arranged between the transport unit and the secondary transport unit in relation to the opening through which the work is transported from the transport unit to the secondary transport unit, thus preventing the work from being held between the transport unit and the housing as the transport unit rotates.

4. A work screening apparatus according to claim 2 or 3, wherein an escape channel is arranged in the transport unit so as to allow the work to escape towards a downstream side as the transport unit rotates, so that the work that fails to be transported to the secondary transport unit is discharged outside of the transport unit.

5. A work screening apparatus according to claim 2 or 3, wherein the transport unit and the secondary transport unit are set at substantially a same relative moving speed at the opening realizing communication between the transport unit and the secondary transport unit, so that the discharge unit discharges only the work that is transported thereto by means of the secondary transport unit.

6. A work screening apparatus according to any one of claims 1 to 3, wherein the transport unit comprises a transport table having a plurality of notches, which are arranged in a circumferential direction thereof at prescribed pitches therebetween, so that the plurality of work holding spaces are defined by the plurality of notches of the transport table, which is installed in the hollow of the housing.

7. A work screening apparatus according to any one of claims 1 to 3, wherein the secondary transport unit comprises a screening table, a part of which is located in proximity to the transport unit via the opening of the housing, so that the plurality of works sequentially transported by the transport unit are put onto an outer peripheral portion of the screening table, by which the plurality of works are rotatably moved towards the prescribed discharge position.

8. A work screening apparatus according to any one of claims 1 to 3,
wherein the discharge unit comprises at least one air exhaust device arranged in
relation to the secondary transport unit, so that the work transported by the secondary
transport unit is discharged at the prescribed discharge position by activating the air
5 exhaust device.

9. A work screening method comprising the steps of:

sequentially transporting a plurality of works, which are completed in
inspection by an inspection apparatus, via a slope way;

putting the plurality of works into a plurality of work holding spaces,
5 which are arranged at prescribed pitches therebetween and provided with a leap
inhibiting wall for inhibiting the work from leaping outside therefrom, and each of
which is moved to communicate with the slope way to receive each of the works from
the slope way; and

automatically discharging each of the works, which are conveyed by
10 means of the plurality of work holding spaces, at a prescribed discharge position in
response to its inspection result produced by the inspection apparatus.

10. A work screening method according to claim 9, wherein a time period in which the plurality of work holding spaces move by one pitch is set shorter than a time interval in which each of the works is transported via the slope way.

11. A work screening method according to claim 9 further comprising the step of:

further transporting each of the plurality of works, which are conveyed by means of the plurality of work holding spaces, towards the prescribed discharge

5 position.

12. A work screening method according to claim 9, wherein each of the works is discharged at the prescribed discharge position by means of an air exhaust device.